



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,535	09/26/2003	Yigal Bejerano	Y. BEJERANO 3-16-1-49-1	3739
47394	7590	01/02/2008	EXAMINER	
HITT GAINES, PC ALCATEL-LUCENT PO BOX 832570 RICHARDSON, TX 75083			BRUCKART, BENJAMIN R	
			ART UNIT	PAPER NUMBER
			2155	
			NOTIFICATION DATE	DELIVERY MODE
			01/02/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@hittgaines.com

Office Action Summary	Application No. 10/672,535	Applicant(s) BEJERANO ET AL.	
	Examiner Benjamin R. Bruckart	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Status of Claims:

Claims 1-21 are pending in this Office Action.

There are no amendments, new or cancellations to the claims.

The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

Response to Arguments

Applicant's arguments filed in the amendment filed 11/8/07, have been fully considered but they are not persuasive. The reasons are set forth below.

Applicant's invention as claimed:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1, 8, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 8, 15 recite the limitation "each other link" in (claim 1, line 9; claim 8, line 7; claim 15, line 7). The examiner understands applicant's arguments that state 'each other link' refer to those links in the undirected graph that are not a link in the primary QoS path of the undirected graph. However, the limitation 'each other link' is still defined broadly and indefinitely and can be interpreted as the reverse or original links as well as undirected links. The examiner encourages applicant to change the wording of 'each other link' to specifically read what is argued.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by “Disjoint Path in Networks” by Suurballe (Applicant IDS).

Regarding claim 1, the Suurballe reference teaches a system for provisioning QoS paths with restoration in a network (Suurballe: page 125; introduction, reliability K paths), comprising:

a primary path generator configured to identify a suitable primary path between source and destination nodes in a network (Suurballe: page 125; source and sink);

an auxiliary graph generator, associated with said primary path generator, configured to construct a directed auxiliary graph from an undirected graph representing said network by reversing each link in a primary QoS path of said undirected graph and replacing each other link in said undirected graph by two directed links (Suurballa: page 128; 3. preliminaries and terms and notations);

a walk identifier, associated with said auxiliary graph generator, configured to identify a walk in said auxiliary directed graph corresponding to a set of bridges in said network (Suurballa: page 130; Fig. 4, interlacing the paths); and

a bridge identifier, associated with said walk identifier, configured to identify a set of bridges in said network such that at least one link of said primary path is protected by a bridge (Suurballa: page 130; Fig. 4, interlacing the paths).

Regarding claim 2, the system as recited in claim 1 wherein said auxiliary graph generator is further configured to assign a zero cost to said each link and said walk identifier is configured to reduce a cost of said walk (Suurballa: page 131; “with length 0 given to the new auxiliary arcs).

Regarding claim 3, the system as recited in claim 1 wherein said walk identifier is configured to satisfy a delay constraint and apply a modified restricted shortest path algorithm to identify said walk (Suurballa: page 131; starting at “to demonstrate point (2)... through definition 4).

Regarding claim 4, the system as recited in claim 1 wherein said walk identifier is configured to identify multiple walks in said auxiliary directed graph, said multiple walks representing multiple restoration paths (Suurballa: page 126; para 1-4; maximum diversity).

Regarding claim 5, the system as recited in claim 1 wherein said primary graph generator further determines said primary QoS path (Suurballa: page 126-127; discussion of approach).

Regarding claim 6, the system as recited in claim 1 wherein said walk identifier decomposes said walk to a set of bridges (Suurballa: page 130; Fig. 4, interlacing the paths).

Regarding claim 7, the system as recited in claim 1 wherein said system is associated with a network operations center of said network (Suurballe: page 125; introduction).

Claims 8-14 and 15-21 are rejected as being substantially similar in limitation and scope and are rejected for the same rationale illustrated above.

REMARKS

Applicant has presented a 3 page argument with no claim amendments.

The Applicant Argues:

1. Suurballe does not disclose finding quality of service paths wherein every link in a QoS path is associated with two weights.

2. Suurballe does not disclose restoration paths.

In response, the examiner respectfully submits:

The rejection is maintained.

Applicant argues features which are not directly in the claims. Applicant does use the language of the claim limitations in the remarks. The independent claims do not recite 'finding QoS paths wherein every link is associated with a cost and delay,' therefore applicant is arguing unclaimed features. Suurballe does teach 'construct a directed auxiliary graph from an undirected graph representing said network by reversing each link in a primary QoS path of said undirected graph and replacing each other link in said undirected graph by two directed links' on page 128; 3. preliminaries and terms and notations where Suurballe 'replaces undirected arc with two oppositely directed arcs and Fig. 4.

Suurballe teaches 'identifying a set of bridges in said network such that at least one link of said primary path is protected by a bridge on page 130; Fig. 4, where the paths are interlaced for backing up.

Suggested Amendments

The examiner still suggests amending the claims to include the formulas and algorithms from the specification to distinguish from the art of record.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

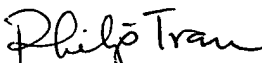
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R Bruckart whose telephone number 571-272-3982.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the examiner whose telephone number is 571-272-3982.

Benjamin R Bruckart
Examiner
Art Unit 2155


PHILIP TRAN
PRIMARY EXAMINER